

IN THE CLAIMS:

1 - 4 (cancelled)

5. (previously presented) In a power supply circuit for generating a supply voltage based on an input constant voltage and supplying the supply voltage to a load, the improvements comprising:

a delay circuit configured to delay the input constant voltage;

an output circuit configured to generate the supply voltage from the input constant voltage delayed by the delay circuit and to supply the generated supply voltage to the load;
and

a bootstrap circuit configured to heighten an input impedance of the output circuit and substantially reduce shock noise.

6. (previously presented) The power supply circuit claimed in claim 5, wherein a current supplied to an input of the output circuit from the bootstrap circuit is set to a current value to drive the output circuit.

7. (previously presented) The power supply circuit claimed in claim 5, wherein the bootstrap circuit includes a circuit component which has the same electrical characteristic as the output circuit, is connected to the output in series, and supplies a current to an input of the output circuit, said current having the same magnitude as a drive current for the circuit component.

8. (previously presented) The power supply circuit claimed in claim 5, wherein the delay circuit comprises:

a resistance serially provided between an input terminal to which the input constant voltage is applied and the output circuit; and

a capacitance element provided between a connection point of said resistance and the output circuit and a base potential terminal serving as a base potential and delaying the input constant voltage.

9. (previously presented) The power supply circuit claimed in claim 5, wherein, when the supply voltage is supplied to a plurality of loads, the delay circuit and the output circuit and the bootstrap circuit are provided for each of the loads.

10. (previously presented) The power supply circuit claimed in claim 5, wherein the bootstrap circuit comprises a transistor.

11. (previously presented) The power supply circuit claimed in claim 10, wherein a base of the transistor is connected to the delay circuit and a collector or emitter of the transistor is connected to the output circuit.

12. (previously presented) The power supply circuit claimed in claim 11, wherein the collector or emitter provide a current based on the connection of the base of the transistor to a transistor of the output circuit.

13. (previously presented) The power supply circuit claimed in claim 12, wherein electrical characteristics of the transistors are the same.

14. (previously presented) The power supply circuit claimed in claim 11, wherein the base of the transistor is connected to the delay circuit through a current mirror circuit.

15. (previously presented) In a power supply circuit for generating a supply voltage based on an input constant voltage and supplying the supply voltage to a load, the improvements comprising:

a delay circuit for delaying the input constant voltage;

an output circuit for receiving the input constant voltage delayed by the delay circuit and generating the supply voltage supply; and

a bootstrap circuit connected between the delay circuit and the output circuit for heightening an input impedance of the output circuit and reducing shock noise.

16. (previously presented) The power supply circuit claimed in claim 13, wherein the bootstrap circuit is connected directly to the output circuit.

17. (new) The power supply circuit claimed in claim 15, wherein the bootstrap circuit comprises a transistor.

18. (new) The power supply circuit claimed in claim 15, wherein the bootstrap circuit is connected directly to the output circuit.